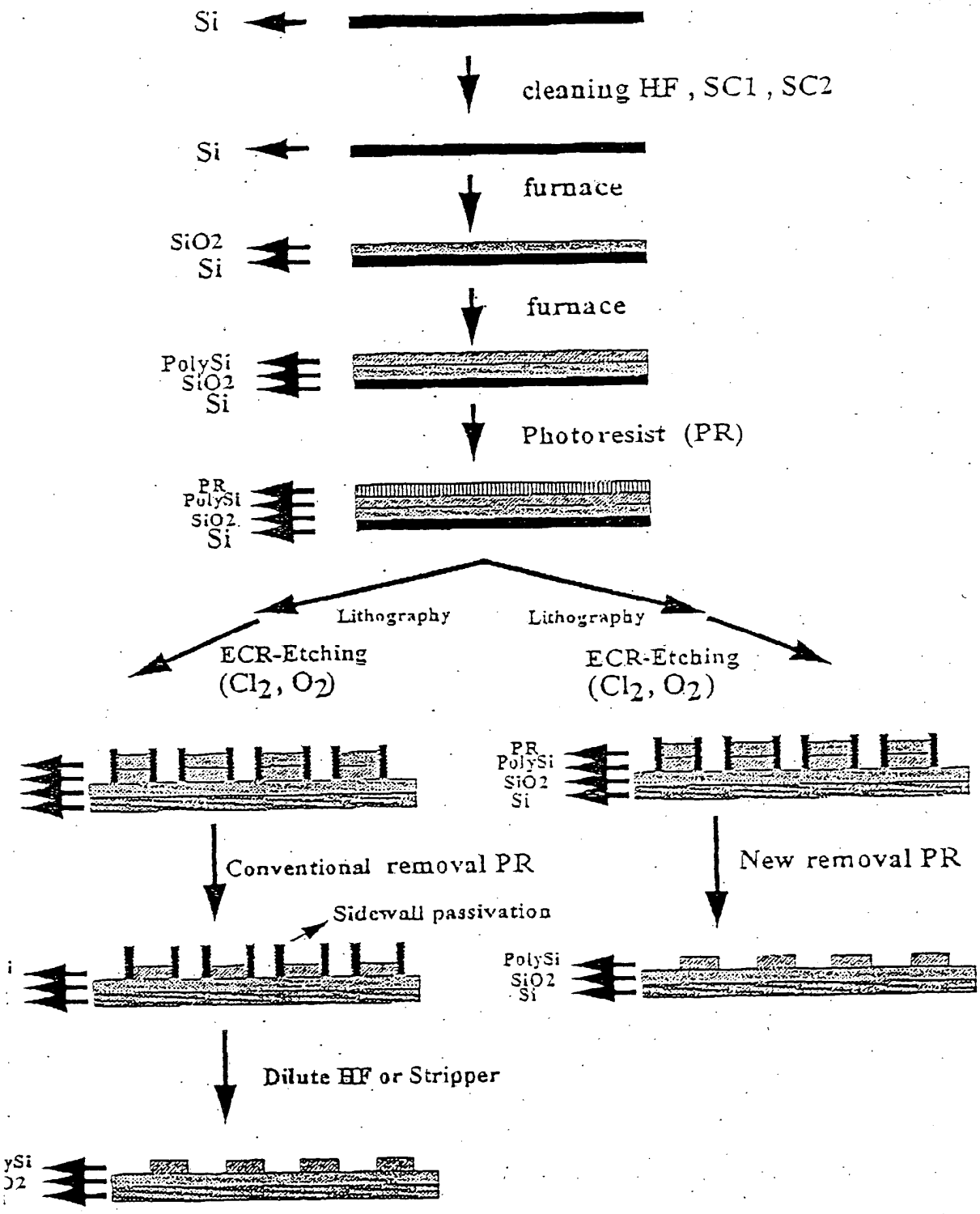


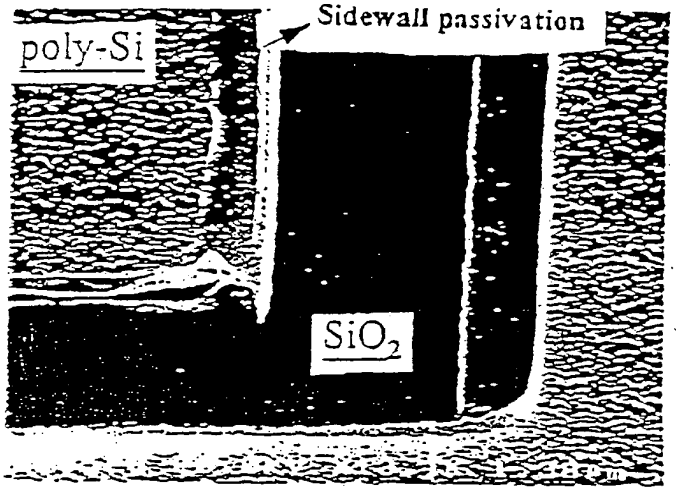
Conventional removal PR = O_3 + (H_2SO_4+H_2O_2)

New removal PR = O_3 + (H_2SO_4 + HF + H_2O_2)

(Fig. 1)

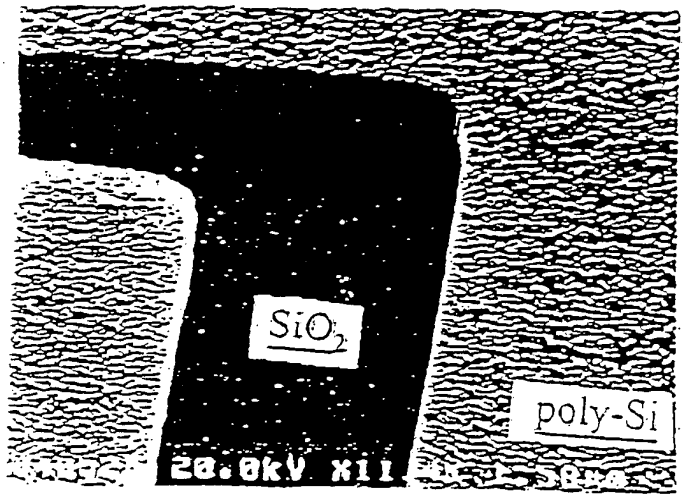
Fig.2)

Conventional removal PR = O_3 + (H_2SO_4+H_2O_2)



(Fig.3)

New removal PR = O_3 + (H_2SO_4 + HF + H_2O_2)



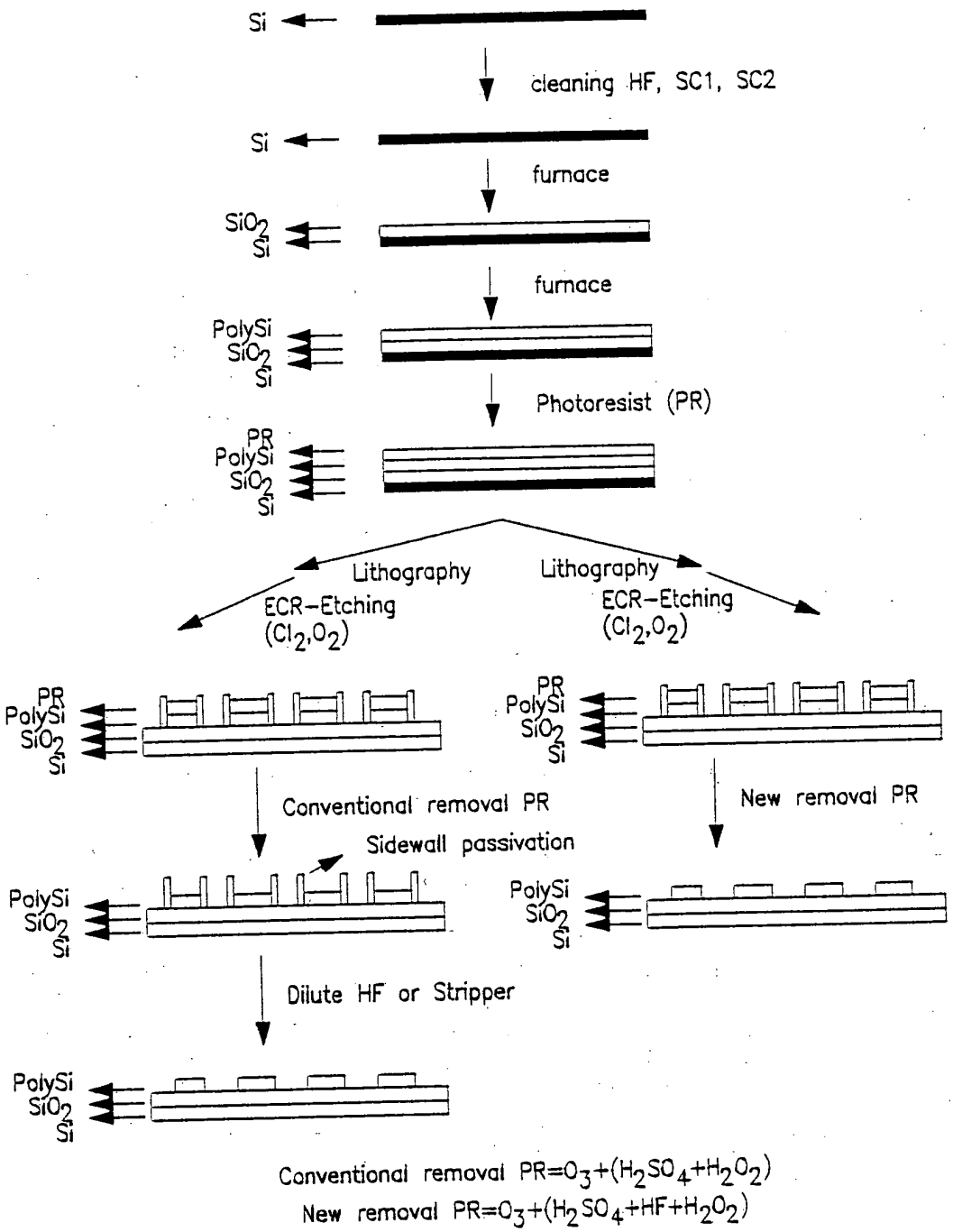

Si
cleaning HF, SC1, SC2
Si
furnace
SiO2
Si
furnace
PolySi
SiO2
Si
Photoresist (PR)
PR
PolySi
SiO2
Si
Lithography
ECR-Etching
(Cl2,O2)
Lithography
ECR-Etching
(Cl2,O2)
PR
PolySi
SiO2
Si
PR
PolySi
SiO2
Si
Conventional removal PR
New removal PR
Sidewall passivation
PolySi
SiO2
Si
PolySi
SiO2
Si
Dilute HF or Stripper
PolySi
SiO2
Si
Conventional removal PR=O3+(H2SO4+H2O2)
New removal PR=O3+(H2SO4+HF+H2O2)

FIG. 1

Conventional removal PR=O_3+(H_2SO_4+H_2O_2)

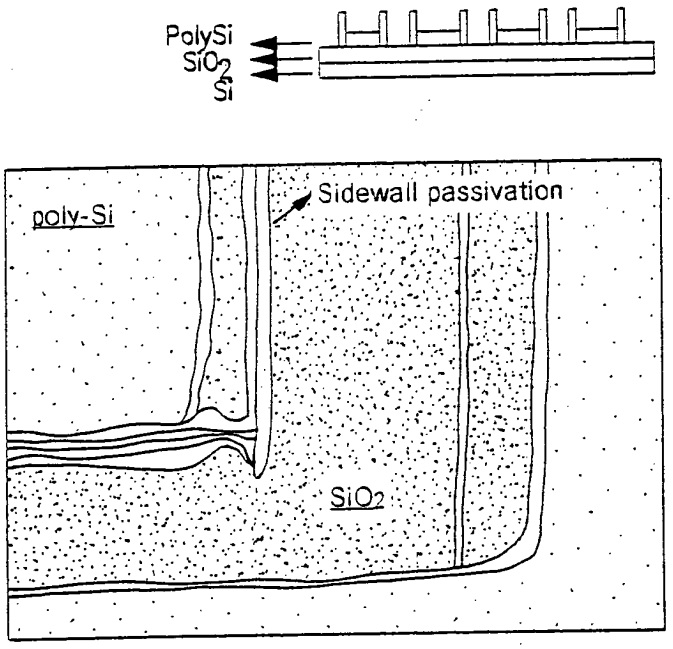


FIG. 2

New removal PR=O_3+(H_2SO_4+HF+H_2O_2)

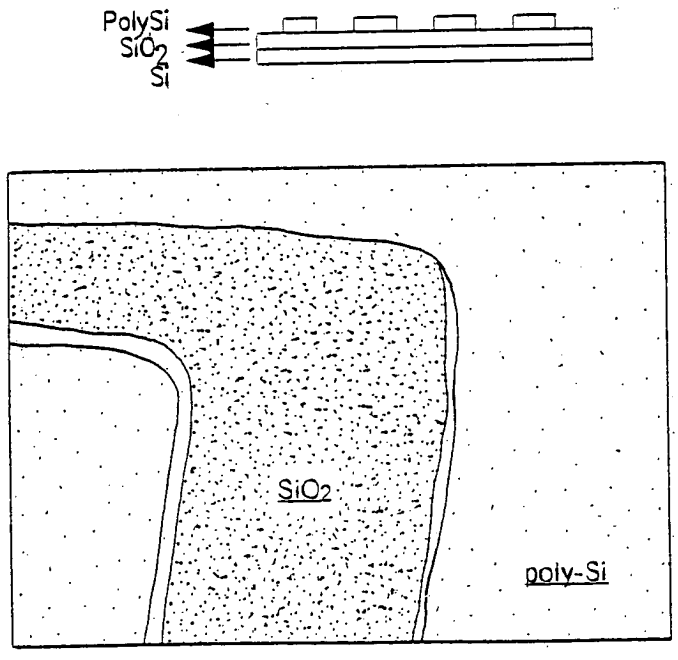


FIG. 3